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AP20 Rec'd PCT/PTO 21 JUL 2006REGISTRABLE MODULAR COVERING FOR ROAD SURFACES

## D E S C R I P T I O N

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## SUBJECT MATTER OF THE INVENTION

The present specification refers to an application for the grant of a patent corresponding to a registrable modular covering for road surfaces, which is aimed at allowing the covering of any surface with vinyl, rubber or linoleum. The covering pieces are configured as modular tiles and are easy to dismantle according to the invention.

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The invention is prepared to facilitate the changing or replacement of the tiles that make up the modular covering with total ease, not requiring any work, when the tiles deteriorate due to stains, burns or any anomaly. The tiles themselves are not adhered to the surface on which they are placed, but fitted and connected in a continuous grid that stops any movement or displacement, obtained from shaping elastomeric material, creating easy dismantling and assembly and, at the same time, allowing access to any point in the surface without the need to carry out an additional operation to remove the fixed pieces on the surface and the retention elements.

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## FIELD OF THE INVENTION

This invention has its application within the industry dedicated to the production of coverings for road surfaces.

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**BACKGROUND OF THE INVENTION**

The applicant is aware of the current existence of the large number of forms and elements aimed at being used for the covering of road surfaces of suitable characteristics.

In this way, it can be indicated that one of ways of installing the covering on a road surface, besides the elements made up of ceramic, terrazzo or similar pieces, is by means of a continuous roll composed of synthetic material, the body of the synthetic roll subsequently being fixed or adhered to the ground itself.

Equally, the existence of a consecutive covering installation for a protected surface with tiles of suitable dimensions that, fixed adjacently, achieve the covering of the surface, is acknowledged.

Both the application of bodies fixed permanently with mortar, which generate the fixing of ceramic pieces made up as bodies of rectangular or quadrangular configuration, and the fixing of elements distributed in a roll, or in rectangular or quadrangular segments made of elastomeric material, allow for the incorporation on the surface where the permanent elements that stop separation of the covered zone, except when a precise extraction application is carried out, are fixed.

If the road surface made up of ceramic pieces or elastomeric elements needs to be

replaced, a specific in situ rectification operation needs to be carried out.

5 The obvious solution to the existing current problem in this area would be an invention that would allow the covering of road surfaces without requiring the use of assistant labour and that would make the use of the covering simpler.

10 However, the applicant is not aware of the existence at present of an invention that is equipped with the characteristics described in this specification.

15 **DESCRIPTION OF THE INVENTION**

The registrable modular covering for road surfaces that the invention proposes allows for the covering of any surface with paving of any kind.  
20 The elements of which the invention is composed can be dismantled, maintained in the location of the tiles that make up the paving in an immoveable way until the replacement of the elements of the covering is no longer required.

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More specifically, the registrable modular covering for road surfaces which is the aim of this invention is made up of the incorporation on the surface of the area to be covered of PVC  
30 extrusion sections, suitable for assembly, the sections being joined together in order to form a continuous framework. The frame obtained from the sections is aimed at being used as a framework and housing for the covering tiles of any kind,  
35 specifically vinyl, rubber or PVC.

The tiles are fitted together inside the frame made of the aforementioned sections, holding to them in their surrounding area and stopping them  
5 lifting up or becoming displaced from the perimeter.

The fixing elements of the tiles are made up as bodies produced in elastomeric material, that  
10 have a hexagonal configuration, presenting in the central area a longitudinal projection which is considerably more rigid than the trapezoidal sides and having a configuration at the ends at an angle of 90 degrees.

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Together with the lesser sides, made up of the ends, a sunken semicircle and a tongue or flange appears in the opposing side of the similar configuration to the semicircle, both areas being  
20 intended to serve as retention zones when the lengthened hexagonal elements are fitted together on the surface of the area to be covered.

The major sides of the trapezoid that  
25 makes up the elastomeric body, that is preferably made of PVC, have a hexagonal configuration and an external side that is inclined towards the internal side adjacent to the longitudinal central projection that is considerable more rigid and  
30 provided in its sides with a groove situated in its sides, whilst the upper surface is totally blunt.

In this groove the sides of the covering pieces can be held, thereby allowing for their  
35 immobilisation.

The elastomeric pieces, preferably made of PVC, form a quadrangle or rectangle appropriate to the covering pieces, joined together by the fixing elements formed with the flange and the sunken piece where the additional piece is fixed, obtaining an ideal fixing for direct application on the surface of the ground and, at the same time, allowing for the removal of the covering pieces in the event that they deteriorate or need to be replaced.

#### BRIEF DESCRIPTION OF THE ACCOMPANYING DRAWINGS

To complement this description, and with the aim of facilitating a better understanding of the characteristics of the invention, this patent specification is accompanied as an integral part by a set of plans in which, for purposes of illustration only, the following is represented:

Figure 1 shows a perspective view of the covering obtained from the invention configured as a registrable modular covering for road surfaces, in which the reticle pieces can be seen, which incorporate in their internal zone the tiles which make up the surface covering of the area to be covered.

Figure 2 represents the view from the end of one of the pieces that works with the invention shown in Figure 1, made up of the elements that act to fix the tiles.

Figure 3 shows a detail of the modular covering invention upon which the covering tiles are installed.

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#### DESCRIPTION OF THE PREFERRED EMBODIMENT

From these diagrams it can be observed how the registrable modular covering for road surfaces is made up of sections made of elastomeric material in a general configuration of hexagonal bodies (2), that incorporate a projection or rib (4) situated longitudinally, subdividing the general body (2) into two trapezoidal areas (3) and (3') with an inclined surface towards the exterior, the central rib (4) having longitudinal grooved lanes positioned at the sides of the body (4), and finishing off the area (4) at the ends of the lesser sides positioned at an angle of 90 degrees, and which have a sunken piece (5), with a configuration similar to a tongue (6), at points close to the apex of the joint, meaning that the bodies (2) are able to meet according to this configuration.

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As can be seen in Figure 3, the reticle obtained from the bodies (2), joined together by the collaboration of the sunken pieces (5) and the tongues (6) form a central area where the laminar elements (10), retained with the coming together of the projections (4) equipped with the lines on the sunken sides line mentioned previously, are fixed.

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